

HISTORIC PROPERTY INVENTORY FORM

IDENTIFICATION SECTION

Field Site No. 104-B-2 OAHP No. Date Recorded 14-Feb-96
Site Name Historic Common
Field Recorder M.E. Crist, I.C. Lindsay, T.E. Marceau
Owner's Name Department of Energy, Richland Operations Office
Address P.O. Box 550
City/State/Zip Code Richland, WA 99352

Status

- ☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Other (HABS, HAER, NHL)
☐ Local Designation

Photography

Photography Neg. No.
(Roll No. & Frame No.)
View of South Elevation
Date Dec-94

Classification ☐ District ☐ Site ☒ Building ☐ Structure ☐ Object
Distric Status ☐ NR ☐ SR ☐ LR ☐ INV
Contributing ☐ Non-Contributing ☐
District/Thematic Nomination Name

Description Section

Materials & Features/Structural Types

Building Type Industry
Plan Modified Rectangular
Structural System Reinforced Concrete and Steel
No. of Stories 1

Roof Type

☐ Gable ☐ Hip
☒ Flat ☐ Pyramidal
☐ Monitor ☐ Other (specify)
☐ Gambrel
☐ Shed

Roof Material

☐ Wood Shingle
☐ Wood Shake
☐ Composition
☐ Slate
☒ Tar/Built-up
☐ Tile
☐ Metal (specify)
☐ Other (specify)
☐ Not visible

Foundation

☐ Log ☐ Concrete
☐ Post & Pier ☐ Block
☐ Stone ☒ Poured
☐ Brick ☐ Other (specify)
☐ Not visible

Cladding (exterior Wall Surfaces)

☐ Log
☐ Horizontal Wood Siding
Rustic/Drop ☐
Clapboard ☐
☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☒ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify)
☐ Other (specify)

Integrity

(Include detailed description in
Description of Physical Appearance)

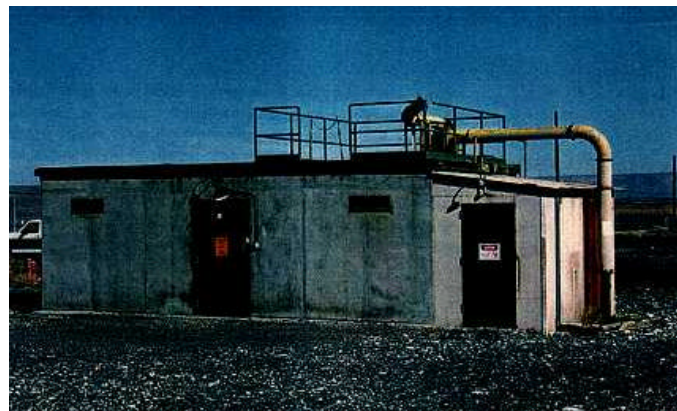
	Intact	Slight	Moderate	Extensive
Changes to plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

State of Washington, Department of Community Development

Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

LOCATION SECTION

Address 100-BC-1 Area
City/Town/County/Zip Code Richland, WA/Benton County/99352
Twp. 13N Range 25E Section 11 1/4 Section 1/4 1/4 Sec
Tax No./Parcel No. Acreage
Quadrangle or map name Riverland, 7.5 min series
UTM References Zone 11 Easting 297326 Northing 5167701
Plat/Block/Lot
Supplemental Map(s)



High Styles/Forms (Check one or more of the following)

<input type="checkbox"/> Greek Revival	<input type="checkbox"/> Spanish Colonial Revival/Mediterranean
<input type="checkbox"/> Gothic Revival	<input type="checkbox"/> Tudor Revival
<input type="checkbox"/> Italianate	<input type="checkbox"/> Craftsman/Arts & Crafts
<input type="checkbox"/> Second Empire	<input type="checkbox"/> Bungalow
<input type="checkbox"/> Romanesque Revival	<input type="checkbox"/> Prairie Style
<input type="checkbox"/> Stick Style	<input type="checkbox"/> Art Deco/Art Moderne
<input type="checkbox"/> Queen Anne	<input type="checkbox"/> Rustic Style
<input type="checkbox"/> Shingle Style	<input type="checkbox"/> International Style
<input type="checkbox"/> Colonial Revival	<input type="checkbox"/> Northwest Style
<input type="checkbox"/> Beaux Arts/Neoclassical	<input type="checkbox"/> Commercial Vernacular
<input type="checkbox"/> Chicago/Commercial Style	<input type="checkbox"/> Residential Vernacular (see below)
<input type="checkbox"/> American Foursquare	<input checked="" type="checkbox"/> Other (specify)
<input type="checkbox"/> Mission Revival	Industrial Vernacular

Vernacular House Types

<input type="checkbox"/> Gable Front	<input type="checkbox"/> Cross Gable
<input type="checkbox"/> Gable Front and Wing	<input type="checkbox"/> Pyramidal/Hipped
<input type="checkbox"/> Side Gable	<input type="checkbox"/> Other (specify)

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

<input type="checkbox"/> Agriculture	<input type="checkbox"/> Conservation	<input type="checkbox"/>
<input type="checkbox"/> Architecture/Landscape Architecture	<input type="checkbox"/> Education	<input type="checkbox"/>
<input type="checkbox"/> Arts	<input type="checkbox"/> Entertainment/Recreation	<input type="checkbox"/>
<input type="checkbox"/> Commerce	<input type="checkbox"/> Ethnic Heritage (specify) _____	<input type="checkbox"/>
<input type="checkbox"/> Communications	<input type="checkbox"/> Health/Medicine	<input type="checkbox"/>
<input type="checkbox"/> Community Planning/Development	<input type="checkbox"/> Manufacturing/Industry	<input checked="" type="checkbox"/> X
	<input type="checkbox"/> Military	<input checked="" type="checkbox"/> X

Statement of Significance

Date of Construction	<u>1951?</u>	Architect/Engineer/Builder	<u>General Electric Hanford Company/U.S. Atomic Energy Comr</u>
<input checked="" type="checkbox"/> X	In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.		
<input type="checkbox"/>	In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).		

A pilot program for the separation and production of tritium was housed in the retrofitted 108-B Chemical Pump House. This project, code named the P-10 Plug Extraction Project, ran from 1952. Gerber notes that "tritium gas was to be a key component in hydrogen (thermonuclear or "Super") weapons then under top secret development." The tritium used in the first hydr Pacific Proving Grounds on October 31, 1952, was produced at 108-B. The P-10 program was short-lived at Hanford, as Gerber observes, "the entire project seemed poised for growth whe transferred to the new Savannah River Plant in 1952". The 108-B Building was demolished in 1984. 104-B-2 functioned as the product storage building; special cells located in the floor w containing irradiated lithium-aluminum target elements before the separations processing at the 108-B building. This property is not associated with an important person (Criterion B), does distinctive architectural features or methods of construction (Criterion C), and does not qualify under Criterion D as the principal source of important information. However, 104-B-2 qualifie to its association with the Cold War production of tritium. Therefore, it is the conclusion of the U.S. Department of Energy that 104-B-2 is eligible for inclusion on the National Register of Hi contributing property within the Hanford Site Historic District.

Description of Physical Appearance

The 104-B-2 Tritium Lab is a reinforced concrete block structure approximately 12 feet long by 24 feet wide (approximately 300 square feet), and 10 feet tall with a small, pre-engineered, annex at the east end. The addition is covered with transite. Two large pipes are visible emerging from the flat roof of the main building and are surrounded by a metal railing. A single me fixture over it is present on the south wall of the addition. One of the pipes emerging from the main roof reaches down and connects to the ground in front of this wall. On the south wall o there is a single door in the center which also has an original light fixture above it. Rectangular louvers can be found on each side of this door near the roofline. No architectural features ar or west walls. The building is located in the 100-B exclusion area, north of the 105-B Reactor building. The building interior is in fair condition although no entry for interior assessment is j tritium contamination. The exterior is in fair to poor condtion, and the roof is in poor condition. The building has been deactivated.

The lab includes a contaminated french drain. This french drain is an inactive, low-level, liquid waste site that operated from 1952 to 1954 to receive an estimated 4 x 10⁴ liters of wastew. Storage Building drain. The tile drain was 3 feet deep, 4 feet in diameter, and gravel filled.

Major Bibliographic References

Cote, Susan L., n.d., Hanford Buildings and Facilities 100 Areas, UNI-2780

Couto, M.M., J.H. Dunkirk, R.J. Landon, F.E. Meyer, 1994, "Pre-Existing" Conditions Survey of Hanford Site Facilities by Bechtel Hanford, Inc., BHI-00221, Rev.

Gerber, Michele S., 1993, Summary of 100-B/C Reactor Operations and Resultant Wastes, Hanford Site, WHC-SD-EN-RPT-004, Rev. 0

Reed, George G., Jr., 1952, History of the P-10 Project as of February 1, 1951 (Declassified with Deletions)

Wahlen, R.K., 1989, History of 100-B Area, WHC-EP-0273

Note: Hanford Site Drawings not available

Politics/Government/Law

Religion

Science & Engineering

Social Movements/Organizations

Transportation

Other (specify) Cold War Era

Study Unit Sub-Theme(s) (specify)

Chemical Separation/Byproduct (Tritium)

mission

tion Project, ran from February 1949 to March
used in the first hydrogen bomb tested at the
poised for growth when the tritium mission was
located in the floor were used to store casks
on (Criterion B), does not possess any
never, 104-B-2 qualifies under Criterion A due
National Register of Historic Places as a

small, pre-engineered, metal storage room
al railing. A single metal door with a light
l. On the south wall of the main building,
rchitectural features are present on the north
nterior assessment is possible because of

x 10⁴ liters of wastewater from the P-10

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